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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,108	02/27/2004	Tatsuhiko Miyata	NIT-415	5068
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/787,108

**Applicant(s)**

MIYATA ET AL.

**Examiner**

Harris C. Wang

**Art Unit**

2139

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 6, 8-10, 12, 15, 16, 19 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 8-10, 12, 15, 16, 19 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date 7/25/2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ ~~Notice of Informal Patent Application~~
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6, 8-10, 12, 15-16, 19, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belani (6772350) in view of Chang (20030229623).

Regarding Claims 1 and 8-9,

Belani teaches a server (Figure 1, **20**) comprising:

first means for categorizing permission setting values indicating whether object information items of various attribute of a registered user are disclosable

to other persons or not depending on a level of the disclosability; (*"Fig. 3 depicts an exemplary access list information 50 for a resource...For each operation, a user or group may be granted "positive" permission or "negative" permission."* Column 7, lines 5-14). The Examiner interprets the Access Control list as categorizing permissions of users. The Applicant defines "whether an item of an object information of each user is disclosable to an outsider" as "a permission" (Paragraph [0070] of Applicant's Specification)

and second means for managing the permission setting values hierarchically. 3  
(*Figure 6. shows the permissions arranged hierarchically by resource and Figure 7 shows permissions arrange hierarchically by user*) where the second means further imparting vertical relations thereto in accordance with types of the attribute information items and systematically categorizing the attribute information items. The Examiner interprets "vertical relations" as hierarchical relations.

Belani does not explicitly teach wherein said second means checks, when there is a request from the user to change the permission setting value for any permission level other than the highest-level operation for any of the object information items, consistency of the permission setting value for each level higher than the level for which the change request has been made with the permission setting value for which the change request has been made,  
said second means corrects, when there is a contradiction in said consistency the permission setting value for each level higher than the level for which the request to change the setting value has been made

Chang (20030229623) teaches when there is a request from the user to change the permission setting value for any permission level other than the highest-level operation for any of the object information items, consistency of the permission setting value for each level higher than the level for which the change request has been made with the permission setting value for which the change request has been made, said second means corrects, when there is a contradiction in said consistency the permission setting value for each level higher than the level for which the request to change the setting value has been made (*"In FIG. 8b, "reverse" or "upward" inheritance is illustrated, such as employed for the JMS Topic hierarchy, wherein a subscriber at a certain level receives subscriber abilities at all "higher" levels in the tree (e.g. for all ancestor or parent levels" Paragraph [0116]) ("a user who is given the "subscriber" role for the "yachting" topic can read articles from the yachting topic, as well as read articles from the "water" topic and the more general "sports" topic. But, that user cannot read articles in "windsurfing", because that topic is not an ancestor of the "yachting" topic in the topic tree hierarchy (e.g. it is a sibling)" Paragraph [0113]) Paragraph [0113] describes "correcting" the permission setting value so that there is a consistency of the permission setting value (ability to read) for each level higher.*

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belani with a reverse upward inheritance model as taught by Chang.

The motivation is "reverse inheritance role assignment methods simplifies the role assignment problem because it only needs to make role assignment at exactly one place" (Paragraph [0114])

Regarding Claims 2 and 3,

Belani and Chang teach a server according to claim 1. Belani also teaches "the operation which can be performed on a resource may include read, write, publish, subscribe, edit, delete, update, etc." (Column 7, lines 3-5). The Examiner interprets "subscribe" as open. Belani further teaches a hierarchy based on resources as shown in Figure 6. Belani further teaches detection means for detecting contradiction in a specified one of the permission setting values based on vertical relations (which the Examiner interprets as hierarchical relations) among the permission levels. (*"If the permissions are not resolved for all the requested operations, the access controller attempts to resolve permissions for the unresolved operations by tracing up the user hierarchy information for the user to determine if permissions have been asserted for the user's ancestors in the access list information of the particular resource"* Column 3, lines 8-13). The Examiner interprets

that resolving requested operations inherently requires detection means for detecting contradictions in hierarchical relations.

However Belani does not explicitly teach wherein said first means categorizes said permission setting values into exactly three respective levels, where executability of open operation is set as a permission level higher than said executability of read operation, and executability of read operation is set as a permission level higher than said executability of write operation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the server of Belani and Chang to have exactly three respective levels, where the open operation is a permission level higher than the read operation and the read operation is set a permission level higher than the write operation.

All the claimed elements were known in the prior art Belani (Belani teaches "the operation which can be performed on a resource may include read, write, publish, subscribe, edit, delete, update, etc." (Column 7, lines 3-5), and one skilled in the art could have combined the elements as claimed by known methods (arranging in a hierarchy also described by Belani) with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention (A hierarchy of permissions, where open is higher than read and read is higher than write).

Regarding Claim 6,

Belani and Chang teach a server according to claim 4, wherein said second means manages said object information items by imparting vertical relations thereto in accordance with types of the object information items and systematically categorizing the object information items. *(Figures 6 and 7 show hierarchical relations in accordance to types of object information items and systematically categorizing object information items)*

The Examiner interprets "vertical relations" as hierarchical relations.

Regarding Claim 8,

Belani teaches a server according to claim 7, wherein, said detection means corrects, when there is contradiction in said consistency, the permission setting value belonging to any of the object information items higher in rank than the object information item to which the setting value that has received said change request belongs. *("if any of the second level ancestors have been granted specific positive or negative permissions for one or more unresolved operations, the permissions for those operations are inherited by user U1, and those operations are considered resolved."* (Column 12, lines 21-26)) The Examiner interprets the contradiction in consistency as the difference between the inherited permission



values and the specific granted permissions. The Examiner further interprets the operations being resolved as the detection means correcting the inconsistency.

Regarding Claims 10-11,

Belani teaches a server comprising: an interface for receiving transmitted information (*Figure 2, User Interface Input Devices, 44*); storage means (*Figure 2, File Storage Subsystem, 36*); and means for reading information stored in the storage means therefrom (*Figure 2, Memory Subsystem, 34*), wherein said storage means has an entry table (*"Fig. 3 depicts an exemplary access list information 50 for a resource "R" organized in a table format" Column 7, lines 5-6*) for storing object information items corresponding to various attribute of a registered user and permission setting values (*"Access list information identifies the resource R in the first column. The second column identifies the users or groups which are allowed to perform operations on resource "R". The third column 56 identifies the various operations that may be performed on resource "R" and permissions associated with the operations for various users." Column 7, lines 6-13*) indicating whether said attribute information items are disclosable to other persons or not, said permission setting values being categorized in accordance with a level of the disclosability thereof.

wherein said permission setting values are categorized into a plurality of levels having vertical relations thereamong and said entry table stores the setting value given to any of the plurality of levels.

*(Figures 6 and 7 show hierarchical relations in accordance to types of object information items and systematically categorizing object information items)*

The Examiner interprets "vertical relations" as hierarchical relations.

The Examiner interprets the Access Control list as categorizing permissions of users. The Applicant defines "whether an item of an object information of each user is disclosable to an outsider" as "a permission" (Paragraph [0070] of Applicant's Specification)

means for extracting a request to change any of the permission setting values from received information; (*"The access controller is configured to receive a request from a particular user requesting performance of one or more operations on a particular resource." Column 2, lines 64-66*)

Belani does not explicitly teach

judging means for judging whether or not the permission setting value for which said change request has been made is contradictory to any of the permission setting values higher in rank than the setting value by referencing said entry table.

Correcting, when there is contradiction, the permission setting value belonging to the level higher than said determined level,

Wherein said object information items are managed by imparting vertical relations thereto in accordance with types of the object information items and categorizing the object information items.

Chang (20030229623) teaches when there is a request from the user to change the permission setting value for any permission level other than the highest-level operation for any of the object information items, consistency of the permission setting value for each level higher than the level for which the change request has been made with the permission setting value for which the change request has been made, said second means corrects, when there is a contradiction in said consistency the permission setting value for each level higher than the level for which the request to change the setting value has been made (*"In FIG. 8b, "reverse" or "upward" inheritance is illustrated, such as employed for the JMS Topic hierarchy, wherein a subscriber at a certain level receives subscriber abilities at all "higher" levels in the tree (e.g. for all ancestor or parent levels" Paragraph [0116]) ("a user who is given the "subscriber" role for the "yachting" topic can read articles form the yachting topic, as well as read articles from the "water" topic and the more general "sports" topic. But, that user cannot read articles in "windsurfing", because that topic is not an ancestor of the "yachting" topic in the topic tree hierarchy (e.g. it is a sibling") Paragraph [0113]) Paragraph [0113] describes "correcting" the permission setting value so that there is a consistency of the permission setting value (ability to read) for each level higher.*

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belani with a reverse upward inheritance model as taught by Chang.

The motivation is "reverse inheritance role assignment methods simplifies the role assignment problem because it only needs to make role assignment at exactly one place" (Paragraph [0114])

Regarding Claim 12,

Belani and Chang teach a server according to claim 11. Belani also teaches "the operation which can be performed on a resource may include read, write, publish, subscribe, edit, delete, update, etc." (Column 7, lines 3-5). The Examiner interprets "subscribe" as open.

However Belani does not explicitly teach wherein said first means categorizes said permission setting values into exactly three respective levels, where executability of open operation is set as a permission level higher than said executability of read operation, and executability of read operation is set as a permission level higher than said executability of write operation.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the server of Belani and Chang to have exactly three respective levels, where the open operation is a permission level higher than the read operation and the read operation is set a permission level higher than the write operation.

All the claimed elements were known in the prior art Belani (Belani teaches "the operation which can be performed on a resource may include read, write, publish, subscribe, edit, delete, update, etc." (Column 7, lines 3-5), and one skilled in the art could have combined the elements as claimed by known methods (arranging in a hierarchy also described by Belani) with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention (A hierarchy of permissions, where open is higher than read and read is higher than write).

Regarding Claim 15,

Belani and Chang teach a server according to claim 11, further comprising: an external storage device storing therein copy data of said entry table. (*"access list information associated with the various resources may be stored in storage subsystem 32...File storage subsystem...may include...a floppy disk drive along with associated removable media, a...(CD-ROM)"* Column 6, lines 7-9, 18-24)

Regarding Claims 16, 19

Belani teaches a method for controlling a server, comprising the step of: categorizing permission setting values indicating whether object

information items corresponding to various attribute of a registered user are disclosable to other persons or not into a plurality of levels; (*"Fig. 3 depicts an exemplary access list information 50 for a resource...For each operation, a user or group may be granted "positive" permission or "negative" permission." Column 7, lines 5-14*). The Examiner interprets the Access Control list as categorizing permissions of users. The Applicant defines "whether an item of an object information of each user is disclosable to an outsider" as "a permission" (Paragraph [0070] of Applicant's Specification)

and hierarchically managing said object information items by imparting thereto vertical relations depending on a level of the disclosability. (*Figure 6 shows the permissions arranged hierarchically by resource and Figure 7 shows permissions arrange hierarchically by user*)

and notifying, when there is contradiction, the user that the setting change request has been refused. (*Figure 8, Indicate that one or more operations in "O" could not be resolved for user "U" and resource "R", 94*)

Belani does not explicitly teach receiving, from said registered user, a request to change the permission setting value for one of the object information items,

judging means for judging whether or not the permission setting value for which said change request has been made is contradictory to any of the permission setting values higher in rank than the setting value by referencing said entry table.

Correcting, when there is contradiction, the permission setting value belonging to the level higher than said determined level,

Wherein said object information items are managed by imparting vertical relations thereto in accordance with types of the object information items and categorizing the object information items.

Chang (20030229623) teaches when there is a request from the user to change the permission setting value for any permission level other than the highest-level operation for any of the object information items, consistency of the permission setting value for each level higher than the level for which the change request has been made with the permission setting value for which the change request has been made, said second means corrects, when there is a contradiction in said consistency the permission setting value for each level higher than the level for which the request to change the setting value has been made. (*In FIG. 8b, "reverse" or "upward" inheritance is illustrated, such as employed for the JMS Topic hierarchy, wherein a subscriber at a certain level receives subscriber abilities at all "higher" levels in the tree (e.g. for all ancestor or parent levels)* Paragraph [0116]) (*"a user who is given the "subscriber" role for the "yachting" topic can read articles from the yachting topic, as well as read articles from the "water" topic and the more general "sports" topic. But, that user cannot read articles in "windsurfing", because that topic is not an ancestor of the "yachting" topic in the topic tree hierarchy (e.g. it is a sibling)"* Paragraph [0113]) Paragraph [0113] describes "correcting" the permission setting value so that there is a consistency of the permission setting value (ability to read) for each level higher.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belani with a reverse upward inheritance model as taught by Chang.

The motivation is "reverse inheritance role assignment methods simplifies the role assignment problem because it only needs to make role assignment at exactly one place" (Paragraph [0114])

Regarding Claim 25,

Belani and Chang teach a server according to claim1, wherein said object information items include identification information of a user terminal and communication capability information of said user terminal; (*"Access list information is typically associated with each resource in a domain and identifies users who are allowed to access the resource"* Column 6, lines 63-65)

Wherein when there is a request from the user to change the permission setting value of said communication capability information from a not permitted state to a permitted state, said second means sets the permission setting value of said identification to a permitted state, and when the permission setting value of said identification information is changed from a permitted state to a not permitted state, (*"the operation which can be performed on a resource may include read, write, publish, subscribe, edit, delete, update, etc."* Column 7, lines 3-5).



The Examiner interprets "communication capability" as the ability to "read, write, publish" etc. When resources are granted based on access list information, the permission is changed accordingly regarding the identification of the user.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harris C. Wang whose telephone number is 5712701462. The examiner can normally be reached on M-F 8-5:30, Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, AYAZ R. SHEIKH can be reached on (571)272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harris C Wang/  
Examiner, Art Unit 2139

/Kristine Kincaid/  
Supervisory Patent Examiner, Art Unit 2139